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| APPLICATION NO.   | FILING DATE               | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|---------------------------|----------------------|---------------------|------------------|
| 10/031,851  | 05/28/2002                | . Horst Rapp         | HMN 2 0021          | 8437             |
| Scott A McCol   | 7590 04/13/2007<br>lister | EXAMINER             |                     |                  |
| Fay Sharpe Fagan Minnich & McKee<br>Seventh Floor<br>1100 Superior Avenue<br>Cleveland, OH 44114-2518 |                           |                      | CHONG, YONG SOO     |                  |
|   |                           |                      | ART UNIT            | PAPER NUMBER     |
|   |                           |                      | 1617                | •                |
| SHORTENED STATUTOR  | Y PERIOD OF RESPONSE      | MAIL DATE            | DELIVER             | Y MODE           |
| 3 MONTHS  |                           | 04/13/2007           | PAPER               |                  |

# Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

|  |  | Application No.  | Applicant(s)  |  |
|--|--|--|---|--|
| Office Action Summary  |  | 10/031,851   | RAPP ET AL.   |  |
|  |  | Examiner   | Art Unit  |  |
|  |  | Yong S. Chong  | 1617  |  |
| Period fo  | The MAILING DATE of this communication apport  | pears on the cover sheet with the  | e correspondence address  |  |
| WHIC<br>- Exter<br>after<br>- If NO<br>- Failu<br>Any r  | ORTENED STATUTORY PERIOD FOR REPLICHEVER IS LONGER, FROM THE MAILING Disions of time may be available under the provisions of 37 CFR 1.1 SIX (6) MONTHS from the mailing date of this communication. It period for reply is specified above, the maximum statutory period for the to reply within the set or extended period for reply will, by statute reply received by the Office later than three months after the mailing and patent term adjustment. See 37 CFR 1.704(b).    | ATE OF THIS COMMUNICATI 136(a). In no event, however, may a reply be will apply and will expire SIX (6) MONTHS fre, cause the application to become ABANDO | ON. The timely filed  Tom the mailing date of this communication.  The property of the communication of the communication of the communication. |  |
| Status   |  |  |   |  |
| 2a)  | Responsive to communication(s) filed on <u>26 D</u> This action is <b>FINAL</b> . 2b) This Since this application is in condition for allowa closed in accordance with the practice under E  | s action is non-final.<br>ince except for formal matters, p  |   |  |
| Dispositi  | on of Claims   |  |   |  |
| 5)   | Claim(s) 1-19 is/are pending in the application 4a) Of the above claim(s) is/are withdraw Claim(s) is/are allowed. Claim(s) 1-19 is/are rejected. Claim(s) is/are objected to. Claim(s) are subject to restriction and/or on Papers The specification is objected to by the Examine The drawing(s) filed on is/are: a) acc Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct The oath or declaration is objected to by the Ex | er. cepted or b) objected to by the drawing(s) be held in abeyance. Stion is required if the drawing(s) is   | See 37 CFR 1.85(a).<br>objected to. See 37 CFR 1.121(d).  |  |
| Priority u   | ınder 35 U.S.C. § 119  |  | •   |  |
| 12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a)  All b)  Some * c)  None of:  1.  Certified copies of the priority documents have been received.  2.  Certified copies of the priority documents have been received in Application No  3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received. |  |  |   |  |
| 2) Notic 3) Inforr   | t(s) e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO/SB/08) r No(s)/Mail Date  | 4) Interview Summa<br>Paper No(s)/Mail<br>5) Notice of Informa<br>6) Other:  | l Date  |  |

#### **DETAILED ACTION**

### Status of the Application

In view of the Appeal Brief filed on 12/26/2006, PROSECUTION IS HEREBY REOPENED. All rejections of the previous Office Action have been withdrawn. The following new rejections will now apply.

Claim(s) 20 has been cancelled. Claim(s) 1-19 are pending and examined herein. The following new rejections will now apply.

To avoid abandonment of the application, appellant must exercise one of the following two options:

- (1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,
- (2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:

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## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in Graham vs John Deere Co., 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-6, 8-13, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wakeman (US Patent 3,317,540) in view of Berger (US Patent 4,574,084).

Wakeman discloses that arylsulfonamides and its known derivatives of formula I (col. 1, lines 15-39) are antimicrobial compounds in pharmaceutical compositions (col. 3, lines 3-20). By topical administration to skin broadly and hair, these pharmaceutical compositions can treat skin diseases because of their antiseptic, antidandruff, and disinfectant properties (col. 3, lines 53-56). Wakeman discloses the pharmaceutical compositions of tosylchloramide(s) and their alkali metal salts in a form, a liquid, solid, water containing preparation, a solution, a shake mixture/dry suspension, or an O/W or

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W/O-emulsion (col. 2, line 32 to col. 3, line 38). Examples 4 and 5 disclose, chloramine-T, in an amount of 10% aqueous stock solution.

However, Wakeman does not expressly disclose the employment of tosylchloramide(s) in the methods of the particular skin diseases herein.

Berger discloses the general teaching that common inflammatory skin diseases, such as psoriasis and herpes, are caused by bacteria, viruses, and fungi. Furthermore, these skin diseases can be effectively treated with biocidal compositions that are used for disinfection (col. 7, line 61 to col. 8, line 8).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to employ tosylchloramide(s) and their salts in treating particular skin diseases such as psoriasis and herpes.

One having ordinary skill in the art at the time the invention was made would have been motivated to employ tosylchloramide(s) and their salts in treating particular skin diseases such as psoriasis and herpes because: (1) Wakeman teach antimicrobial, disinfectant, and biocidal pharmaceutical compositions comprising tosylchloramide(s) and their salts for treating skin diseases; (2) Berger teaches that common skin diseases, such as psoriasis and herpes, are caused by bacteria, viruses, and fungi; and (3) Berger also give the general teaching that such skin diseases can be treated with biocidal compositions that are used for disinfection. Therefore, one of ordinary skill in the art would have had a reasonable expectation of success in treating skin diseases such as psoriasis and herpes with an antimicrobial composition comprising tosylchloramide(s) as disclosed by Wakeman because of the beneficial therapeutic

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effects of tosylchloramide(s) on killing and destroying harmful microorganisms that cause such skin diseases.

Claims 1-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vandevelde et al. (WO 91/07876) in view of Berger (US Patent 4,574,084).

Vandevelde et al. discloses that tosylchloramide(s) and its known derivatives, in particular, such as Chloramin T, are useful in a pharmaceutical composition by topical administration to skin broadly and hair and methods of treating skin diseases therein such as retrovirus (see abstract and page 1-8 and claims 1-28). Vandevelde et al. discloses the pharmaceutical compositions of tosylchloramide(s) in various forms herein such as a liquid, solid, water containing preparation, a solution, a shake mixture/dry suspension, or an O/W or W/O-emulsion, and the instant effective amounts of Chloramin T (see Example 1-13 at page 9-20).

Vandevelde et al. does not expressly disclose the employment of tosylchloramide(s), in methods of the particular skin diseases herein.

Berger teach as discussed above.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to employ tosylchloramide(s) and their salts in treating particular skin diseases such as psoriasis and herpes.

One having ordinary skill in the art at the time the invention was made would have been motivated to employ tosylchloramide(s) and their salts in treating particular skin diseases such as psoriasis and herpes because: (1) Vandevelde et al. teach an

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antimicrobial pharmaceutical composition comprising tosylchloramide(s) and their salts for treating skin diseases; (2) Berger teaches that common skin diseases, such as psoriasis and herpes, are caused by bacteria, viruses, and fungi; and (3) Berger also give the general teaching that such skin diseases can be treated with biocidal compositions that are used for disinfection. Therefore, one of ordinary skill in the art would have had a reasonable expectation of success in treating skin diseases such as psoriasis and herpes with an antimicrobial composition comprising tosylchloramide(s) as disclosed by Vandevelde et al. because of the beneficial therapeutic effects of tosylchloramide(s) on killing and destroying harmful microorganisms that cause such skin diseases.

Claims 1-19 are rejected under 35 U.S.C. 103(a) a: being unpatentable over Harwardt et al. (DE 41 37 544) in view of Berger (US Patent 4,574,084).

Harwardt et al. discloses that tosylchloramide(s) and its known derivatives, in particular, such as Chloramin T, are useful in a pharmaceutical composition by topical administration to skin broadly and hair and methods of treating skin diseases therein such as retrovirus (see abstract and page 1-4 and claims 1-7). Harwardt et al. discloses the pharmaceutical compositions of tosylchloramide(s) in various forms herein such as a liquid, solid, water containing preparation, a solution, a shake mixture/dry suspension, or an O/W or W/O-emulsion, and the instant effective amounts of Chloramin T (see Example 1-5 at page 3-4).

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Harwardt et al. does not expressly disclose the employment of tosylchloramide(s) in methods of the particular skin diseases herein.

Berger teach as discussed above.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to employ tosylchloramide(s) and their salts in treating particular skin diseases such as psoriasis and herpes.

One having ordinary skill in the art at the time the invention was made would have been motivated to employ tosylchloramide(s) and their salts in treating particular skin diseases such as psoriasis and herpes because: (1) Harwardt et al. teach an antimicrobial pharmaceutical composition comprising tosylchloramide(s) and their salts for treating skin diseases; (2) Berger teaches that common skin diseases, such as psoriasis and herpes, are caused by bacteria, viruses, and fungi; and (3) Berger also give the general teaching that such skin diseases can be treated with biocidal compositions that are used for disinfection. Therefore, one of ordinary skill in the art would have had a reasonable expectation of success in treating skin diseases such as psoriasis and herpes with an antimicrobial composition comprising tosylchloramide(s) as disclosed by Harwardt et al. because of the beneficial therapeutic effects of tosylchloramide(s) on killing and destroying harmful microorganisms that cause such skin diseases.

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#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yong S. Chong whose telephone number is (571)-272-8513. The examiner can normally be reached on M-F, 9-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, SREENI PADMANABHAN can be reached on (571)-272-0629. The fax phone number for the organization where this application or proceeding is assigned is (571)-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

**YSC** 

COEFFICIAN PROTECT EXAMINER